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° **What is claimed is:**

1. A method for inducing an enhanced immunological response against at least one antigen in a mammal, said method comprising the steps of:
 - inoculating the mammal with a first
- 5 recombinant vector comprising a DNA vector and a gene encoding said antigen; and
 - inoculating the mammal with a boosting immunization with a second recombinant vector comprising a second DNA vector and the gene encoding said antigen.
- 10 2. The method according to claim 1, wherein the first recombinant vector comprises a recombinant vaccinia virus vector.
- 15 3. The method according to claim 1, wherein the first recombinant vector comprises a recombinant fowlpox virus vector.
- 20 4. The method according to claim 1, wherein the first recombinant vector comprises an adenovirus vector.
- 25 5. The method according to claim 1, wherein the recombinant vectors further comprise a gene encoding an immunostimulatory molecule.
6. The method according to claim 1, wherein the second recombinant vector comprises a recombinant vaccinia virus vector.
- 30 7. The method according to claim 1 wherein the second recombinant vector comprises a recombinant fowlpox virus vector.
- 35 8. The method according to claim 1 wherein the

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- ° second recombinant vector comprises a recombinant adenovirus vector.

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9. The method of immunotherapy for treatment of a cancer patient, said method comprising the steps of:
- 5 - immunizing said patient with an effective amount of a first recombinant vector comprising a first viral vector and a gene encoding a tumor-associated antigen; and
- boosting said patient with an effective
- 10 amount of a second recombinant vector comprising a second viral vector and the gene encoding the tumor-associated antigen.
10. The method according to claim 9, wherein the tumor-associated antigen comprises gp100.
11. The method according to claim 9, wherein the tumor-associated antigen comprises MART-1.
12. The method according to claim 9, wherein the tumor-associated antigen comprises TRP-1.
13. The method according to claim 9, wherein the tumor-associated antigen comprises TRP-2.
14. The method according to claim 9, wherein the recombinant vectors further comprise a gene encoding an immunostimulatory molecule.
15. The method according to claim 9, wherein the first viral vector comprises a vaccinia virus.
16. The method according to claim 9, wherein the first viral vector comprises a fowlpox virus.

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